

REMARKS

Applicant wishes to thank the Examiner for the indication that claims 7-8 contain allowable subject matter. Claims 7 and 8, which were indicated as allowable, have been rewritten in independent form, as new claims 12-15, incorporating all of the limitations of the base claim and any intervening claims therein. Specifically, claim 12 incorporates the subject matter of claims 4, 5, 6 and 7; claim 13 incorporates the subject matter of claims 4, 6 and 7; claim 14 incorporates the subject matter of claims 4, 5, 6, 7 and 8; and claim 15 incorporates the subject matter of claims 4, 6, 7 and 8. Applicant has also added claims 16-18 (corresponding to 9-11) to depend from new claims 12-15, 16 and 17, respectively. Claims 12-18 are believed to be allowable. Claims 4-11 have been canceled, without prejudice or disclaimer. Claims 2 and 3 have been amended in order to remove the rejection under 35 U.S.C. 112, 2nd paragraph, and to clarify the present invention.

Applicant's invention is a workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the workpiece-machining device. The workpiece-transfer device includes a movement means with a rectangular coordinate system for moving a traveling body in a first direction along the direction in which the workpiece-machining device and a workpiece-storage device stand in a line as well as in a second horizontal direction orthogonal to the first direction. The traveling body includes a gripping means for gripping a material or product workpiece. The workpiece-storage device

includes a product-housing section and a material-housing section provided in parallel in the second direction.

Reconsideration and removal of the rejection of claims 1-3 and 9-11 under 35 U.S.C. 102(b) as being anticipated by Lockert (U.S. Patent No. 5,244,343) are respectfully requested on the basis of the present amendment to the claim and the following distinctions.

Lockert discloses material handling equipment having a sheet separator capable of handling sheets of varied thickness and flexibility, where the material handling equipment has a carriage assembly 26 reciprocally movable along guide bars 24, a forward vacuum head 36 and a rear lift assembly 52, and a workplace 131 having a plurality of workholders 132 which clamps to sheet-like material and holds the sheet in position.

In contrast with the invention of claim 1, as amended, Lockert does not disclose a product-housing section and a material-housing section, as described in claims 2 and 3. Applicant's claim 1 has been clarified to show this feature. Thus, it is requested that claim 1, as amended, and claims 2 and 3, which depend from claim 1, are not anticipated by, or obvious over, Lockert.

In view of the amendments to the claims, and the remarks set forth above distinguishing the claimed invention from the cited prior art reference, Applicant respectfully submits the objections and rejections of the Office Action have been overcome.

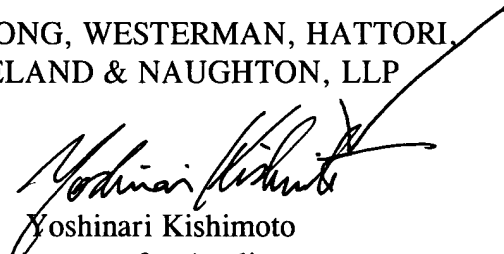
Accordingly, it is respectfully requested that the objections and rejections of the Office Action be withdrawn and that claims 1-3 and 12-18, as now amended, be allowed.

If, for any reason, it is believed that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN, HATTORI,
MCLELAND & NAUGHTON, LLP



Yoshinari Kishimoto
Attorney for Applicant
Reg. No. 47,327

Atty. Docket No. **991059**
1725 K Street, N.W., Suite 1000
Washington, DC 20006
Tel: (202) 659-2930
Fax: (202) 887-0357
WGK/YK/mt

VERSION WITH MARKING TO SHOW CHANGES MADE

part #15

IN THE CLAIMS:

Please cancel claims 4-11, without prejudice or disclaimer.

Please amend the following claims as indicated:

1. (Amended) A workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the workpiece-machining device, characterized in that the workpiece-transfer device includes a movement means with a rectangular coordinate system for moving a traveling body in a first direction along the direction in which the workpiece-machining device and a workpiece-storage device stand in a line as well as in a second horizontal direction [or thogonal] orthogonal to the first direction, and in that said traveling body includes a gripping means for gripping a material or product workpiece, wherein said workpiece-storage device includes a product-housing section and a material-housing section provided in parallel in said second direction.

2. (Amended) A workpiece-transfer device as in Claim 1, characterized in that [said workpiece-storage device comprises a product-housing section and a material-housing section provided in parallel in said second direction, and in that] the [arrangement] entire length of the product and material-housing sections [is set so as] does not [to] exceed the arrangement range of said workpiece-machining device along the second direction.

3. (Amended) A workpiece-transfer device as in Claim 1 [or Claim 2], characterized in that [said workpiece-storage device comprises a product-housing section and a material-housing section, in

that] said rectangular coordinate system movement means can move said traveling body to said product and material-housing sections so that said traveling body can be moved to position and load a material workpiece gripped by the gripping means of said traveling body, relative to a positioning member of said workpiece-machining device.

Please add the following claims as indicated:

12. (New) A workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the workpiece-machining device, characterized by comprising one workpiece-gripping means, characterized in that said workpiece-gripping means is provided on a traveling body that travels between the workpiece-machining device and a workpiece-storage device capable of storing material and product workpieces,

said workpiece-gripping means comprises a plurality of suction pads,

said product workpiece is a small workpiece partially cut off from a material workpiece by the workpiece-machining device,

said workpiece-gripping means uses a large number of suction pads to load a material workpiece in the workpiece-machining device, while using fewer suction pads than that used in the loading of the material workpiece to unload a product workpiece from the workpiece-machining device.

13. (New) A workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the

workpiece-machining device, characterized by comprising one workpiece-gripping means, characterized in that said workpiece-gripping means comprises a plurality of suction pads,

said product workpiece is a small workpiece partially cut off from a material workpiece by the workpiece-machining device,

said workpiece-gripping means uses a large number of suction pads to load a material workpiece in the workpiece-machining device, while using fewer suction pads than that used in the loading of the material workpiece to unload a product workpiece from the workpiece-machining device.

14. (New) A workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the workpiece-machining device, characterized by comprising one workpiece-gripping means, characterized in that said workpiece-gripping means is provided on a traveling body that travels between the workpiece-machining device and a workpiece-storage device capable of storing material and product workpieces,

said workpiece-gripping means comprises a plurality of suction pads,

said product workpiece is a small workpiece partially cut off from a material workpiece by the workpiece-machining device,

said workpiece-gripping means uses a large number of suction pads to load a material workpiece in the workpiece-machining device, while using fewer suction pads than that used in the loading of the material workpiece to unload a product workpiece from the workpiece-machining device,

a small number of suction pads closer to the workpiece-machining device are used to unload a product workpiece.

15. (New) A workpiece-transfer device for loading a material workpiece in a workpiece-machining device and unloading a machined product workpiece from the workpiece-machining device, characterized by comprising one workpiece-gripping means,

said workpiece-gripping means comprises a plurality of suction pads,

said product workpiece is a small workpiece partially cut off from a material workpiece by the workpiece-machining device,

said workpiece-gripping means uses a large number of suction pads to load a material workpiece in the workpiece-machining device, while using fewer suction pads than that used in the loading of the material workpiece to unload a product workpiece from the workpiece-machining device,

a small number of suction pads closer to the workpiece-machining device are used to unload a product workpiece.

16. (New) A workpiece-transfer device as defined in Claim 12, 13, 14 or 15 characterized in that some of the plurality of suction pads each comprise a group of small pads, and in that a constriction is provided for a suction path for the individual small pad.

17. (New) A workpiece-transfer device as in Claim 16, characterized in that the suction pads comprising a group of small pads are placed closer to the workpiece-machining device.

18. (New) A workpiece-transfer device as in Claim 17, characterized in that the suction pads placed closer to the workpiece-machining device and comprising a group of small pads are first selected in unloading a product workpiece.